CIS 193 – C# Programming

Windows Presentation Foundation and Silverlight
WPF in a Nutshell

• Aka “Avalon”, Released in 2006
• Overhauled graphics sub-subsystem for the .NET framework
• Built on DirectX for hardware acceleration
• XAML – eXtensible App Markup Language
  – *Procedural* declaration of UI elements
  – XML but *extensible* via .NET objects
WPF Bulletpoints

• Graphical services
• Data binding
• Media services
• Layout
• Templates and styles
• Documents
• Text
• Annotations
• Alternative input
• Accessibility
• Interoperability
Winforms vs. WPF

• WPF clearly wins on features
• Procedural vs. declarative programming is an open debate (mini-*holy war*)
• Winforms is more *mature* than WPF...
  – Better tested technology
  – Better documentation, samples, and support
  – (Nearly) complete Mono support
• ...but WPF is the path to the future
Silverlight

• Originally WPF/E(verywhere)
• WPF + stripped down .NET framework
  – No 3D-support, but strong 2D support
• Intended for mobile/web development, i.e., competitor to Flash
  – But can leverage everything you love about .NET
• The primary framework for Windows 7 Mobile
More Information

• WPF on MSDN
• MS’s Silverlight website
• Silverlight tools on MSDN